MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2016 / 2017 SESSION

TPS 2491 – PHYSICAL SECURITY

(All sections / Groups)

29 MAY 2017
9.00am – 11.00am
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 5 pages, including the cover page.
2. Attempt all **FIVE** questions. The distribution of the marks for each question is given.
3. Please write **ALL** your answers in the Answer Booklet provided.

QUESTION 1

a) What is Opportunity Theory? Based on the Opportunity Theory, state TWO factors that affect the occurrence of a crime.

[3 marks]

b) The psychologist Hans Eysenck developed the term psychoticism to explain particular behavior and personality traits. Describe FOUR factors of psychoticism.

[4 marks]

c) Information security is the art and science of protecting valuable information in all the various ways it is stored, transmitted, and used. In essence however, information security rests on three basic principles that are used on every day to protect the information in today's interconnected world. Describe the THREE basic principles of information security that mentioned in the previous statement.

[3 marks]

Continued ...

QUESTION 2

a) Due to the rampant shoplifting in Melaka Raya, the owner of the jewelry shop has installed a wall vibration sensor on the interior walls of a specific room that used to store the jewelry. However, the wall vibration sensor has caused unreliable detection and nuisance alarm. As a physical security specialist, identify TWO main causes of the unreliable detection and nuisance alarm of the wall vibration sensor respectively.

[4 marks]

b) What is the difference between nuisance alarm and false alarm? Provide ONE possible cause for each of the alarm failure.

[4 marks]

c) Protective lighting enables security force personnel to observe the place without being seen. Identify TWO requirements of a good protective lighting.

[2 marks]

Continued ...

QUESTION 3

a) Closed Circuit Television (CCTV) systems provide the added benefit for documenting the events of an intrusion and the characteristics of the intruder. The installation and configuration of a CCTV system is directly related to the nature of the security requirement. List FOUR places which are suitable to be monitored by CCTV system.

[4 marks]

b) Fence is the most common type of structural barrier as it serves as first layer of security at the perimeter. Chain-link fence is the most frequently used fence for security purposes. List FOUR advantages of using chain-link fence.

[4 marks]

c) The access control card is used to control the access of personnel to the restricted facilities and confidential data. There are several access types of control card available in the market. What is the difference between magnetic stripe card and optical card?

[2 marks]

Continued ...

QUESTION 4

a) Risk management is the set of actions taken to address the identified risks. What are the basic steps involved in a good risk management program?

[4 marks]

b) Security survey is used to identify potential problem areas and should be conducted on a regular basis. As a security manager of PPX company, you need to suggest TWO suitable persons that are able to conduct the security survey for the company director.

[2 marks]

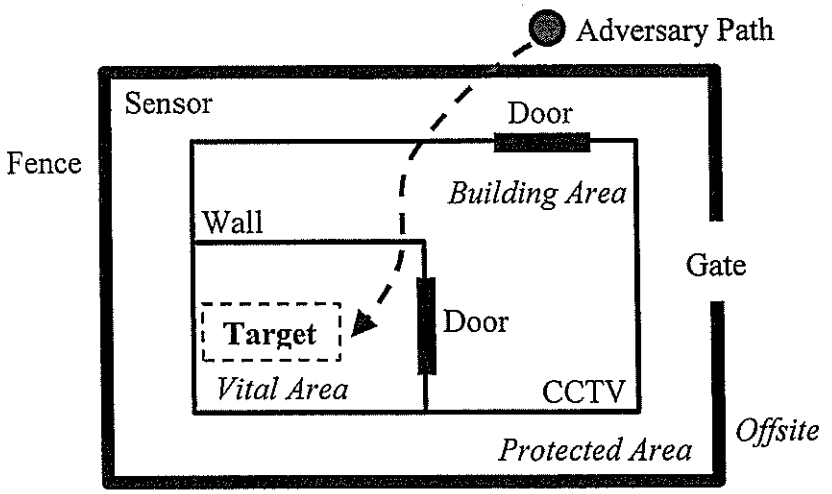
c) Backup operation makes a copy of data so that this data may be used to restore original in the event of data lost. Distinguish between the incremental backup and differential backup for backup operations.

[4 marks]

Continued ...

QUESTION 5

a) The 2D map of a facility plant that shown below indicates a physical path of an adversary that might damage or sabotage the facility inside the vital area.



Design an Adversary Sequence Diagram (ASD) to represent the 2D map above.

[4 marks]

b) Briefly explain the need of conducting a security audit.

[3 marks]

c) Mr. John is a newly employed IT manager in a software company. He believed that business information is an important asset of the company. To protect the integrity of the information and minimize the probability of intruder, he decided to deploy Defense in Depth (DID) approach that focus on the computer security in the company. As a staff in the IT department, what are your suggestions on the focus of DID that able to help Mr. John?

[3 marks]

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